

REMARKS

The pending Office Action addresses and rejects claims 1-26 and 29-63. Applicants respectfully request reconsideration and allowance based on the remarks submitted herewith.

At the outset, Applicants thank the Examiner for extending the courtesy of a telephone interview on February 26, 2009 to the undersigned attorney for Applicants. During the interview, agreement was reached that the arguments provided below will most likely be persuasive to overcome the present rejection.

Rejections Pursuant to 35 U.S.C. § 103(a)

U.S. Patent No. 6,126,662 of Carmichael et al. in view of U.S. Patent No. 5,122,132 of Bremer

The Examiner rejects claims 1-7, 12, 13, 15-22, 29-35, 40-46, and 48-55 pursuant to 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,126,662 of Carmichael et al. (“Carmichael”) in view of U.S. Patent No. 5,122,132 of Bremer (“Bremer”). Claims 1 and 29 are independent claims. The Examiner argues that Carmichael discloses an apparatus for attaching tissue to bone as claimed by Applicants except for the distal tip member being of a harder material than a proximal main member. The Examiner relies on Bremer to remedy the deficiencies of Carmichael. Applicants disagree.

Claims 1 and 29 each recite an expander pin that includes a shaft sized to expand an expandable body *laterally* when the expander pin is driven into the expandable body. Additionally, claims 1 and 29 each recite a *tissue attachment member* that is *formed on the shaft of the expander pin*. As agreed upon during the interview, Carmichael fails to disclose an expander pin having either of those features. Bremer does not remedy the deficiencies of Carmichael.

The distractor (18) of Carmichael, which the Examiner asserted during the interview forms the claimed expander pin, is not configured to expand the body portion (30) of the fixture (12) of Carmichael. This is at least because Carmichael fails to teach a body portion (30) of the fixture (12) that is capable of expanding laterally. Rather, the only movement of the fixture (12) caused by the distractor (18) that could possibly be considered an expansion involves distracting the fixture (12) away from the footing (16). (See col. 9, lines 13-27 and FIGS. 9-11.) The distractor (18) is rotated to produce a force in the direction of the footing (16), and because the footing (16) is firmly integrated into the bone tissue,

the fixture (12) separates away from the footing (16) while the footing (16) remains stationary. (*Id.*) A person having ordinary skill in the art would not describe the movement of the fixture (12) away from the footing (16) as lateral expansion.

Carmichael also fails to disclose an expander pin having a tissue attachment member formed on the shaft of the expander pin. In the present rejection, the Examiner argues that the equivalent of the expander pin is the distal surface (352) of a healing cap (320). As discussed during the interview, any portion of the healing cap (320) cannot be the equivalent of an expander pin because the healing cap (320) is not configured to expand any portion of the fixture (12). The healing cap (320) is configured to be coupled to the fixture (12) to seal the distal opening (44) of the fixture (12) during osseointegration. (*See col. 8, lines 1-55.*) The only component of Carmichael that can possibly be considered to be the equivalent of an expander pin is the distractor (18). The distractor (18), in addition to failing to expand the body laterally, does not have a tissue attachment member formed on its shaft.

The distractor (18) of Carmichael has proximal and distal ends (182, 184) that are configured to be disposed in the fixture (12) and the footing (16) of the implant, respectively. (*See col. 6, lines 8-31.*) Neither end (182, 184) is exposed to any tissue. While an o-ring (196) is disposed on the cylindrical portion (186) of the distractor (18), the o-ring (196) also remains disposed in the fixture (12) throughout the duration of use of the distractor (18) and thus is never exposed to tissue. (*See id.* at lines 32-43 and FIGS. 9 and 10.) The only portion of the distractor (18) exposed to any portion of the body during distraction is the cylindrical portion (186). (*See FIG. 10.*) The cylindrical portion (186), however, does not include a tissue attachment member formed thereon, as required by claims 1 and 29. In fact, Carmichael specifically teaches that the cylindrical portion (186) is to be *as smooth as possible* because *it is not desirable* to have any osseointegration occur along the surface (186) of the distractor (18). (*See col. 10, lines 25-32; emphasis added.*) Accordingly, not only does Carmichael fail to disclose a tissue attachment member formed on the shaft of its distractor (18), it *specifically teaches against* the inclusion of such a formation. No person having ordinary skill in the art would ever incorporate any teaching directed to a tissue attachment member formed on a shaft to the distractor (18) of Carmichael given its specific teachings against such a modification.

Bremer fails to remedy the deficiencies of Carmichael. The Examiner relies upon Bremer to teach an apparatus where a distal portion is made from a harder material than a proximal main portion.

Bremer, however, does not include any expandable body or expander pin because it is not configured to expand. Thus, Bremer cannot remedy the aforementioned deficiencies of Carmichael.

Accordingly, claims 1 and 29, as well as claims 2-7, 12, 13, 15-22, 30-35, 40-46, and 48-55 which depend therefrom, represents allowable subject matter.

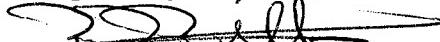
U.S. Patent No. 6,126,662 of Carmichael et al. in view of U.S. Patent No. 5,122,132 of Bremer further in view of any one of U.S. Patent No. 5,370,662 of Stone et al., U.S. Patent No. 5,948,002 of Bonutti, U.S. Patent No. 5,725,529 of Nicholson, and U.S. Patent No. 5,078,818 of Moll et al.

The Examiner makes a number of further obviousness rejections pursuant to 35 U.S.C. § 103(a), relying on Carmichael, Bremer, and one of a number of different references. More particularly, the Examiner further relies on U.S. Patent No. 5,370,662 of Stone et al. to reject claims 8-10 and 36-38, U.S. Patent No. 5,948,002 of Bonutti to reject claims 11 and 39, U.S. Patent No. 5,725,529 of Nicholson to reject claims 14 and 47, and U.S. Patent No. 5,078,818 of Moll et al. to reject claims 23-26 and 56-59. None of the references cited by the Examiner remedy the deficiencies of Carmichael. Accordingly, at least because claims 8-11, 14, 23-26, 36-39, 47, and 56-59 depend from allowable base claims, each claim also represents allowable subject matter.

Conclusion

All pending claims are believed to be in condition for allowance. If the Examiner believes that an interview would facilitate the resolution of any outstanding issues, he is kindly requested to contact the undersigned.

Respectfully submitted,



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